FILE 'USPAT' ENTERED AT 21:12:30 ON 12 SEP 1997

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 *      WELCOME TO THE          *
 *   U.S. PATENT TEXT FILE      *
 ********************************

=> s ((tumor? or tumour?)(w)necro? factor?)(5a)receptor?
      19357 TUMOR?
       1789 TUMOUR?
       8023 NECRO?
     390714 FACTOR?
       1684 NECRO? FACTOR?
            (NECRO?(W)FACTOR?)
      28325 RECEPTOR?
L1       73 ((TUMOR? OR TUMOUR?)(W)NECRO?
FACTOR?)(5A)RECEPTOR?

=> s l1 and (dna? or cdna? or rna? or mrna? or clon?)
      20738 DNA?
       6513 CDNA?
      11909 RNA?
       5858 MRNA?
      17106 CLON?
L2       70 L1 AND (DNA? OR CDNA? OR RNA? OR MRNA?
OR CLON?)

=> d 1-20
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AVAILABLE:

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al., 530/388.15; 424/142.1, 145.1, 158.1; 435/335; 530/388.23, 388.24
:IMAGE AVAILABLE:

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252.3, 320.1; 935/11, 22, 70, 73 :IMAGE AVAILABLE:

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536/23.5, 23.51; 604/51, 52, 53; 935/9, 22, 32, 33, 34, 52, 57 :IMAGE
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levels in mammals using **tumor** **necrosis** **factor** **receptor**;
Cindy A. Jacobs, et al., 424/134.1; 435/69.7; 514/12, 825; 530/350, 387.3, 866, 868 :IMAGE AVAILABLE:

=> d 20 ab

US PAT NO: 5,605,690 :IMAGE AVAILABLE: L2: 20 of 70

ABSTRACT:
A method for treating TNF-dependent inflammatory diseases in a mammal by
administering a TNF antagonist, such as soluble TNFR.

=> d 20 clms

US PAT NO: 5,605,690 :IMAGE AVAILABLE: L2: 20 of 70

CLAIMS:

CLMS(1)

We claim:

1. A method for lowering the levels of active TNF-.alpha. in a mammal in
need thereof which comprises administering to said mammal a TNF-lowering
amount of a TNF antagonist selected from the group consisting of:
(a) a TNF receptor comprising the sequence of amino acids 3-163 of SEQ
ID NO:1; and
(b) a chimeric antibody comprising a TNF receptor according to (a) fused
to the constant domain of an immunoglobulin molecule.

CLMS(2)

2. A method for lowering the levels of active TNF-.alpha. in a mammal in
need thereof which comprises administering to said mammal a TNF-lowering
amount of a TNF receptor comprising the sequence of amino acids 3-163 of
SEQ ID NO:1.

CLMS(3)

3. A method for lowering the levels of active TNF-.alpha. in a mammal in
need thereof which comprises administering to said mammal a TNF-lowering
amount of a chimeric antibody comprising a TNF receptor comprising the
sequence of amino acids 3-163 of SEQ ID NO:1 fused to the constant domain
of an immunoglobulin molecule.

CLMS(4)

4. A method for lowering the levels of active TNF-.alpha. in a mammal
having arthritis, which comprises administering to such mammal a
therapeutically effective amount of a TNF-antagonist selected from the
group consisting of:
(a) a TNF receptor comprising the sequence of amino acids 3-163 of SEQ
ID NO:1; and
(b) a chimeric antibody comprising a TNF receptor according to (a) fused
to the constant domain of an immunoglobin molecule.

CLMS(5)

5. A method for lowering the levels of active TNF-.alpha. in a mammal
having arthritis, which comprises administering to said mammal a
TNF-lowering amount of a TNF receptor comprising the sequence of amino
acids 3-163 of SEQ ID NO:1.

CLMS(6)

6. A method for lowering the levels of active TNF-.alpha. in a mammal
having arthritis, which comprises administering to said mammal a
TNF-lowering amount of a chimeric antibody comprising a TNF receptor
comprising the sequence of amino acids 3-163 of SEQ ID NO:1 fused to the
constant domain of an immunoglobulin molecule.

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US PAT NO: 5,605,690 :IMAGE AVAILABLE: L2: 20 of 70
DATE ISSUED: Feb. 25, 1997
TITLE: Methods of lowering active TNF-.alpha. levels in mammals
using **tumor** **necrosis** **factor** **receptor**
INVENTOR: Cindy A. Jacobs, Seattle, WA
Craig A. Smith, Seattle, WA
ASSIGNEE: Immunex Corporation, Seattle, WA (U.S. corp.)
APPL-NO: 08/385,229
DATE FILED: Feb. 8, 1995
REL-US-DATA: Continuation of Ser. No. 946,236, Sep. 15, 1992, abandoned, which is a continuation-in-part of Ser. No. 523,635, May 10, 1990, Pat. No. 5,395,760, which is a continuation-in-part of Ser. No. 421,417, Oct. 13, 1989, abandoned, which is a continuation-in-part of Ser. No. 405,370, Sep. 11, 1989, abandoned, which is a continuation-in-part of Ser. No. 403,241, Sep. 5, 1989, abandoned.
INT-CL: :6: A61K 39/395; A61K 38/00; C12P 21/04; C07K 14/715
US-CL-ISSUED: 424/134.1; 435/69.7; 514/12, 825; 530/350, 387.3, 866, 868
US-CL-CURRENT: 424/134.1; 435/69.7; 514/12, 825; 530/350, 387.3, 866, 868
SEARCH-FLD: 435/69.1, 69.7, 172.3, 240.27; 424/85.1, 134.1; 530/351,
387.3, 868; 935/9, 12, 15
REF-CITED:

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WO9013575	11/1990	World Intellectual Property Organization	C07K 15/14

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ART-UNIT: 186
PRIM-EXMR: Lila Feisee
ASST-EXMR: John Lucas
LEGAL-REP: Stephen L. Malaska

ABSTRACT:
A method for treating TNF-dependent inflammatory diseases in a mammal by

administering a TNF antagonist, such as soluble TNFR.
6 Claims, 7 Drawing Figures

=> d 21-30

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328, 365; 530/300, 351; 536/23.4 :IMAGE AVAILABLE:

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factor-.alpha. and -.beta. **receptors**; Craig A. Smith, et al., 435/365; 424/85.1; 435/69.4, 172.3; 530/351, 388.23; 536/23.51 :IMAGE
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935/11, 34, 36 :IMAGE AVAILABLE:

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:IMAGE AVAILABLE:

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24.5 :IMAGE AVAILABLE:

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:IMAGE AVAILABLE:

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cancer using oligonucleotides; Larry J. Smith, 514/44 :IMAGE AVAILABLE:

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